

No.: 10/694,891

AMENDMENT TO THE CLAIMS

1-12. (Canceled)

13. (New) A semiconductor device, comprising a first DRAM section including a first memory cell having a first capacitance and a second DRAM section including a second memory cell having a second capacitance different from the first capacitance, the first DRAM section and the second DRAM section being provided on the same semiconductor substrate,

wherein the first memory cell has a first capacitive element including a first capacitor lower electrode, a first capacitor insulating film, and a first capacitor upper electrode,

the second memory cell has a second capacitive element including a second capacitor lower electrode, a second capacitor insulating film, and a second capacitor upper electrode, and

an operating voltage of the first DRAM section is different from an operating voltage of the second DRAM section.

14. (New) The semiconductor device of claim 13, wherein the operating voltage of the first DRAM section is higher than the operating voltage of the second DRAM section, and the first capacitance is smaller than the second capacitance.

15. (New) The semiconductor device of claim 13, wherein the surface area of the second capacitor lower electrode is larger than the surface area of the first capacitor lower electrode.

16. (New) The semiconductor device of claim 13, wherein the first capacitor lower electrode is composed of a diffusion layer formed in the semiconductor substrate, and

No.: 10/694,891

the second capacitor lower electrode is composed of a conductive film formed on the insulating film provided on the semiconductor substrate.

17. (New) The semiconductor device of claim 13, wherein the first capacitive element has a structure of a planar capacitor, and

the second capacitive element has a structure of a stacked capacitor.

18. (New) The semiconductor device of claim 13, wherein the first capacitor insulating film and the second capacitor insulating film are made of different materials.

19. (New) The semiconductor device of claim 13, wherein the first DRAM section and the second DRAM section are formed on the same chip.

20. (New) The semiconductor device of claim 13, wherein charge stored in the first capacitive element is smaller than charge stored in the second capacitive element.

21. (New) The semiconductor device of claim 13, wherein the first memory cell includes a gate insulating film formed on the semiconductor substrate and a gate electrode formed on the gate insulating film, and

the first capacitor insulating film is made of the same insulating film as the gate insulating film.